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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,300	07/09/2003	Melvin D. Frerking	BS01-055-C2	7112

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EXAMINER	
LUK, LAWRENCE W	
ART UNIT	PAPER NUMBER
2187	

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/615,300	FRERKING ET AL.	
	Examiner	Art Unit	
	Lawrence W. Luk	2187	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 November 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *53-81* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *53-81* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

TW

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 53-81 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of U.S. Patent No. 6,624,616 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 53 of the Application	Claim 1 of US 6,624,616 B1
A portable battery recharge station comprising:	**A portable battery recharge station comprising:**
	(a) means for receiving a secondary battery;
a supervisory circuit associated with a voltage requirement of a secondary battery; and	**(b) means for determining a voltage requirement of the secondary battery (col. 6, lines 51-54);**
a voltage converter in communication with the supervisory circuit,	**(c) a voltage converter connected to the determining means and the receiving means;**
	(d) a power source connected to the voltage converter,
wherein when the secondary battery is in contact with the supervisory circuit,	**wherein when the secondary battery is in contact with the receiving means, the determining means obtains the voltage requirement,**
the supervisory circuit instructs the voltage converter to supply a voltage to	**wherein the determining means instructs the voltage converter to**

the secondary battery in accordance with the voltage requirement.	**supply a voltage to the secondary battery in accordance with the voltage requirement,** and
	wherein the voltage converter receives power from the power source, converts the power in accordance with the voltage requirement, and supplies the converted power to the secondary battery.

After analyzing the language of the claims, it is clear that claim 53 of the Application is anticipated by claim 1 in US Pat. 6,624,616 B1.

3. Claims 53-81 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of U.S. Patent No. 6,441,589 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claim 53 of the Application	Claim 1 of US Pat. 6,441,589 B1
A portable battery recharge station comprising:	**A portable battery recharge station comprising:**
	(a) a holder adapted to receive a secondary battery having a voltage requirement;

a supervisory circuit associated with a voltage requirement of a secondary battery; and	**(b) a programming resistor connected to the holder, wherein the voltage requirement can be determined from the value of the programming resistor; (c) a supervisory circuit connected to the programming resistor;**
a voltage converter in communication with the supervisory circuit,	**(d) a voltage converter connected to the supervisory circuit and the holder; and**
	(e) a portable power source connected to the voltage converter,
wherein when the secondary battery is in contact with the supervisory circuit,	**wherein when the secondary battery is placed in the holder, the supervisory circuit determines the voltage requirement based on the resistance of the programming resistor,**
the supervisory circuit instructs the voltage converter to supply a voltage to the secondary battery in accordance with the voltage requirement.	**wherein the supervisory circuit instructs the voltage converter to supply a voltage to the holder in accordance with the voltage requirement, and**

	wherein the voltage converter receives power from the portable power source, converts the power in accordance with the voltage requirement, and wherein the voltage converter receives power from the portable power source, converts the power in accordance with the voltage requirement, and supplies the converted power to the secondary battery.

After analyzing the language of the claims, it is clear that claim 53 of the Application is anticipated by claim 1 in US Pat. 6,441,589 B1.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 53-57, 59, 66-68, 70 75 and 76** are rejected under 35 U.S.C. 102(e) as being anticipated by Bork et al. (6,633,932).

Claim 53

As to claim 53, Bork et al. discloses in figures 13 & 14, a portable battery recharge station (26) comprising: a supervisory circuit (electronic circuitry 42 as supervisory circuit within connector 40 for charging the cellular phone battery 14, see column 6, lines 43-45) associated with a voltage requirement of a secondary battery (14); and a voltage converter (computer 26 has a voltage converter, see column 7, lines (65-68) in communication with the supervisory circuit (42), wherein when the secondary battery (14) is in contact with the supervisory circuit (42, see column 6, lines 35-42), the supervisory circuit (42) instructs the voltage converter to supply a voltage to the secondary battery (14) in accordance with the voltage requirement.

Claim 54

As to claim 54, Bork et al. discloses in figures 13, a holder configured to receive the secondary battery (cellular phone has a battery compartment to hold the battery).

Claim 55

As to claim 55, Bork et al. discloses in figures 13, a socket configured to receive the secondary battery.

Claims 56 and 67

As to claims 56 and 67, Bork et al. discloses in figures 13 & 14, column 7, lines 54-67, the voltage converter is configured to receive power from a power source,

converts the power in accordance with the voltage requirement, and supplies the converted power to the secondary battery.

Claims 57 and 68

As to claims 57 and 68, Bork et al. discloses in figures 13, the power source is an electrical outlet (20).

Claims 59 and 70

As to claims 59 and 70, Bork et al. discloses in figures 13, the power source is one of **a replaceable battery, a rechargeable battery,** a renewable battery, and a renewable fuel cell.

Claim 66

As to claim 66, Bork et al. discloses in figures 13 & 14, a battery charging system comprising: a charging cord (16) having a first end that is configured to mate with a device having a secondary battery (14); and a portable battery recharge station (26) having a voltage converter (computer 26 has a voltage converter, see column 7, lines 65-68) and a supervisory circuit (electronic circuitry 42 as supervisory circuit within connector 40 for charging the cellular phone battery 14, see column 6, lines 43-45), the portable battery recharge station is configured to receive a second end (38) of the charging cord (16), wherein when the charging cord (16) is connected to the device (14) and the portable battery recharge station (26), the supervisory circuit (42) determines a voltage requirement of the secondary battery (14) and the supervisory circuit then instructs the voltage converter to supply a voltage to the secondary battery (14) in accordance with the voltage requirement.

Claim 75

As to claim 75, Bork et al. discloses in figures 13 & 14 and column 7, lines 54-67, a method for recharging secondary batteries comprising: obtaining a voltage requirement of a secondary battery (14); and instructing a voltage converter (computer 26 has a voltage converter, see column 7, lines 65-68) to receive power from a power source (20), to convert the power to meet the voltage requirement, and supply the converted power to the secondary battery (14).

Claim 76

As to claim 76, Bork et al. discloses in figures 13 & 14, the obtaining involves a supervisory circuit (electronic circuitry 42 as supervisory circuit within connector 40 for charging the cellular phone battery 14, see column 6, lines 43-45).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 77-81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bork et al. (6,633,932) in view of McClure et al. (5,198,743).

Claims 77 and 80

As to claims 77 and 80, Bork et al. discloses the elements as in claims 75 and 66.

Bork et al. does not disclose expressly the limitation of " **the obtaining involves a programming resistor**".

McClure et al. discloses in figure 1, column 5, lines 13-36, determining a voltage requirement of the battery based on a resistance value of the programming resistor.

Bork et al. and McClure et al. are analogous art because they are from the "same field of endeavor" and the battery charging art.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include a programming resistor to determine a voltage requirement of the battery.

The suggestion/motivation for doing so would have been to enable the microprocessor to determine the battery current through control of the voltages and sensing the output of the comparator for increased control of circuitry (column 5, lines 33-36).

Therefore, it would have been obvious to combine McClure et al. with the device of Bork et al. for the benefit of determining a voltage requirement of the secondary battery based on a resistance value of the programming resistor to obtain the invention as specified in claims 77 and 80.

Claim 78

As to claim 78, Bork et al. in view of McClure et al. are applied supra, and McClure et al. further disclose in figure 1 and column 5, lines 27-36, the voltage converter receives power from a power source, converts the power in accordance with the voltage requirement, and supplies the converted power to the secondary battery.

Claims 79 and 81

As to claim 79, Bork et al. in view of McClure et al. are applied supra, and Bork et al. further disclose in figure 13 and column 2, lines 42-48, the programming resistor is associated with a device-specific charging cord (16) that is connected to a device housing the secondary battery (14).

8. **Claims 58, 60-62, 69 and 71-74** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bork et al. (6,633,932) in view of Rozsypal (2002/0101224).

Claims 58 and 69

As to claims 59 and 69, Bork et al. discloses the elements as in claims 53 and 66.

Bork et al. does not expressly disclose the limitation of "**the power source is a vehicular battery**".

Rozsypal discloses in column 1, [0002], the power source is a vehicular battery (for all mobile devices).

Bork et al. and Rozsypal are analogous art because they are from "the same field of endeavor" and the battery charging art.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have a vehicular battery be the power source of Bork et al.

The suggestion/motivation for doing so would have been to provide accurate power delivery to sensitive electronic devices in vehicles (column 1, [0002]).

Therefor, it would have been obvious to combine the vehicular battery as taught by Rozsypal for electrical energy systems incorporating electric vehicles with the device of Bork et al. for the benefit of powering electrical vehicles with the battery system of Bork et al.

Claims 60 and 71

As to claims 60 and 71, Bork et al. in view of Rozsypal are applied supra, and Rozsypal further disclose in column 1, [0002], the replaceable battery is one of an alkaline battery, **a lithium battery**, and a zinc-air battery.

Claims 61 and 72

As to claims 61 and 72, Bork et al. in view of Rozsypal are applied supra, and Rozsypal further disclose in column 1, [0002], the replaceable battery is one of a **NiCad battery**, a NiH2 battery, a NiMH battery, a Li-ion battery, a Li-polymer battery, a zinc-air battery, and a lead acid battery.

Claims 62 and 73

As to claims 62 and 73, Bork et al. in view of Rozsypal are applied supra, and Bork et al. further disclose in figure 13, the recharger is adapted to receive energy from an external power source (20).

9. **Claims 63-65 and 74** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bork et al. (6,633,932) in view of Hockaday (6,326,097).

Claims 63 and 74

As to claims 63 and 74, Bork et al. discloses the elements as in claims 75 and 66.

Bork et al. does not disclose expressly the limitation of " **the renewable fuel cell is one of a methanol fuel cell and a renewable electrolyte type cell**".

Hockaday discloses in column 2, lines 10-24, a micro fuel cell is designed to replace the standard cellular phone battery packs, column 2, lines 39-43, and fuel cell can refuel with common ethanol or methanol, an abundant and renewable energy source.

Bork et al. and Hockaday are analogous art because they are from the "same field of endeavor" and the battery charging art.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include a renewable fuel cells to replace the renewable battery.

The suggestion/motivation for doing so would have been to enable powering numerous electrical devices including portable electronics and power tools; such as cellular phones, portable PCs, computer peripherals, and portable vacuum cleaners (Col. 1, lines 53-59).

Therefore, it would have been obvious to combine Hockaday with the device of Bork et al. for the benefit of replacing batteries with fuel cells that pack more energy in a smaller space than conventional rechargeable batteries (Col. 1, lines 64-66).

Claim 64

As to claim 64, Bork et al. in view of Hockaday are applied supra, and further Hockaday discloses in column 2, lines 26-29, a reservoir adapted to contain fuel of the renewable battery.

Claim 65

As to claim 65, Bork et al. in view of Hockaday are applied supra, and further Hockaday discloses in column 2, lines 20-24, a gauge adapted to measure a level of the fuel.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence W Luk whose telephone number is (571)272-2080. The examiner can normally be reached on 7 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald A Sparks can be reached on (571)272-4201. The fax phone number for the organization where this application or proceeding are (703)746-7239, (571)272-2100 for regular communication and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to receptionist whose telephone number is (571)272-2100.

DONALD SPARKS
SUPERVISORY PATENT EXAMINER

LWL
March 16, 2005